

Appl. No. 09/788,229
Amdt. dated Jan. 13, 2005

Reply to Office Action of October 26, 2004

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended):

A voice over Internet protocol (VOIP) system for supporting real time communications for both pulse code modulation (PCM) ~~[[,]]~~ telephone networks and Internet protocol (IP) telephone packet networks in an enterprise including in combination:

a directory of PCM and IP addresses in ~~[[an]]~~ the enterprise including a translation address database for a plurality members of the enterprise ~~having IP terminals, addresses for IP telephones with Internet connectivity, and addresses of other VOIP gateways on the Internet;~~

a VOIP gateway linked with the directory and connected to receive a calling party request[[s]] from ~~[[both]]~~ either PCM ~~[[and]]~~ or IP telephones, the VOIP gateway providing a voice prompt[[s]] and response[[s]] to the calling party request[[s]], the request in the form of either DTMF digits or voice signals; and

the VOIP gateway further operating in response to a calling party approval to automatically process a link between ~~[[the]]~~ a calling party and a called party using a translated address ~~assigned~~ in the directory translation address database to identify the called party.

Claims 2 (currently amended): The VOIP system according to Claim 1 wherein the voice prompt[[s]] and response[[s]] of the VOIP gateway are provided by a voice response unit (VRU) built into the VOIP gateway.

Claims 3-4 (cancelled)

Claim 5 (currently amended): The VOIP system according to Claim 1 wherein the voice prompt[[s]] and response[[s]] are provided by a voice response unit (VRU) coupled over a local area network (LAN) to the VOIP gateway.

Claims 6-7 (cancelled)

Claim 8 (original): The VOIP system according to Claim 1 wherein the directory is in the form of a dedicated directory server linked with the VOIP gateway over a local area network (LAN).

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Claims 9 (original): The VOIP system according to Claim 1 wherein the directory includes fields to uniquely identify a member of the enterprise by name and number codes required to translate between PCM (PSTN) and LAN (IP) environments.

Claim 10 (currently amended):

A method for supporting a real time communication[[s]] for and between both a pulse code modulation (PCM) telephone network[[s]] and an Internet protocol (IP) telephone packet network[[s]] in an enterprise including the steps of:

- providing a gateway responsive to calls from a calling parties party on either [[an]] the IP telephone network or [[a]] the PCM telephone network for answering calls;
- playing directory prompt messages to the calling party;
- responding to DTMF or voice recognition signals from the calling party for obtaining [[the]] a closest match of a name found in a directory database;
- negotiating an acceptable name with the calling party;
- looking up an address translation in [[a]] the directory database in response to [[a]] the name selected by the calling party; and
- attempting [[a]] the real time [[call]] communication to [[the]] a called party utilizing [[a]] the address translation corresponding to the name, ~~translated address~~ if required.

Claim 11 (original): The method according to Claim 10 wherein the directory prompts are obtained from an IP gateway.

Claim 12 (currently amended): The method according to Claim 10 wherein the step of negotiating an acceptable name includes the gateway prompting the calling party for a next name and a previous name of the closest match of the name found in the directory database. ~~responses by the gateway for finding the next name and finding the previous name for allowing a calling party to accurately access a desired name.~~

Claim 13 (original): The method according to Claim 12 wherein the directory prompts are obtained from an IP gateway.

Claim 14 (new): The method according to Claim 10 wherein the directory prompts comprise acceptance of an audibly announced name.

Claim 15 (new): The method according to Claim 10 further comprising searching the directory database for the closest match of the name, the directory database comprising a plurality of databases of the enterprise relationally linked.

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Claim 16 (new): The VOIP system according to Claim 9 wherein the directory comprises relational links to other databases within the enterprise.

Claim 17 (new):

A VOIP directory service system comprising:

- a VOIP gateway receiving a calling party request from either a PCM network or an IP network comprising a desired called party;

- a decoder coupled to the VOIP gateway, the decoder interpreting the calling party request into computer-readable format such that the gateway is able to perform a look-up from a plurality of directory service memories to determine a match with the calling party request;

- a voice response unit coupled to the decoder and the VOIP gateway to audibly reply to the calling party a name associated with the match and an approval prompt to accept the name; and

- a translation database coupled to the VOIP gateway, upon receipt of acceptance of the name the translation database looks up a connection address for the name corresponding to the desired called party, and the system proceeds with a communication between the calling party and the desired called party.

Claim 18 (new): The VOIP directory service system of Claim 17, wherein the approval prompt comprises a "find next" and a "find previous" prompt for the calling party to select.

Claim 19 (new): The VOIP directory service system of Claim 17, wherein the look-up is from a plurality of directory service memories using a number of relational links to each of the directory service memories.

Claim 20 (new): The VOIP directory service system of Claim 17 further comprising a PBX system coupled to the VOIP gateway and receiving communication routing commands from the gateway.

Claim 21 (new): The VOIP directory service system of Claim 20, wherein the VOIP gateway is embedded within the PBX system.

Claim 22 (new): The VOIP directory service system of Claim 17, wherein the calling party request comprises one of a voice response or a key response.